

Abstract

The present invention relates to an electronically commutatable motor, whose excitation windings are controllable via semiconductor output stages by an electronic control unit with the aid of PWM control signals, a setpoint value being specifiable to the control unit, and the control unit emitting corresponding PWM control signals to the semiconductor output stages; a motor characteristic curve, from which an assigned nominal operating speed is derivable for the setpoint value, being stored in the control unit, and the derived nominal operating speed being able to be compared to the actual speed of the motor, and if a predefinable or predefined speed difference between the nominal operating speed and the actual speed is exceeded, the control unit and/or the semiconductor output stages is/are able to be switched off. The derivation of the nominal operating speed for the predefined setpoint value is facilitated by a three-dimensional characteristics field determined by four coordinate points.